Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, or claims in the application. Claims 1 and 13-15 are being canceled and claims 42 and 43 added.

Listing of the Claims:

- 1. (Canceled)
- 2. (Currently Amended) A process for generating chlorous acid which comprises contacting a chlorite salt precursor with a cation exchange material in the hydrogen form in a moist environment and outside an electric field for a time sufficient to form chlorous acid.
 - 3. (Original) The process as described in Claim 2 wherein said cation exchange material is mixed with an additive.
- 4. (Currently Amended) A process for generating chlorous acid which comprises contacting a chlorate salt precursor with a cation exchange material in the hydrogen form in a moist environment and outside an electric field for a time sufficient to form chlorous acid.

- 5. (Original) The process as described in Claim 4 wherein said cation exchange material is mixed with an additive.
- 6. (Original) A process for generating chlorous acid which comprises contacting a chlorate salt precursor and an acid with an anion exchange material in a reducing ionic form in a moist environment for a time sufficient to form chlorous acid.
- 7. (Original) The process as described in Claim 6 wherein said anion exchange material is mixed with an additive.
- 8. (Original) A process for generating chlorous acid which comprises contacting an acid with an anion exchange material in the chlorate form in a moist environment for a time sufficient to form chlorous acid.
- 9. (Original) The process as described in Claim 8 wherein said anion exchange material is mixed with an additive.
- 10. (Currently Amended) A process for generating chlorous acid and chlorine dioxide which comprises contacting a chlorite salt precursor with a cation exchange material in the hydrogen form and a catalytic material in a moist environment and outside an

a4

<u>electric field</u> for a time sufficient to form chlorous acid and chlorine dioxide together.

- 11. (Original) The process as described in Claim 10 wherein said catalytic material is on said cation exchange material.
- 12. (Original) The process as described in Claim 10 wherein said catalytic material is an ion exchange material.
 - 13. (Canceled)
 - 14. (Canceled)
 - 15. (Canceled)
- 16. (Original) A process for generating chlorous acid and chlorine dioxide which comprises contacting a chlorate salt precursor with a cation exchange material in the hydrogen form and a catalytic material in a moist environment for a time sufficient to form chlorous acid and chlorine dioxide together.
- 17. (Original) A process as described in Claim 16 wherein said catalytic material is on said cation exchange material.

- 18. (Original) A process as described in Claim 16 wherein said catalytic material is an ion exchange material.
- 19. (Original) A process for generating chlorous acid and chlorine dioxide which comprises contacting a chlorate salt precursor and an acid with a catalytic material in a moist environment for a time sufficient to form chlorous acid and chlorine dioxide together.
- 20. (Original) The process as described in Claim 19 wherein said catalytic material is on an ion exchange material.
- 21. (Original) The process as described in Claim 19 wherein said catalytic material is an ion exchange material.
- 22. (Original) The process as described in Claim 19 wherein said catalytic material is an ion exchange material in a reducing ionic form.
- 23. (Original) A process for generating chlorous acid and chlorine dioxide which comprises contacting an acid with an anion exchange material in the chlorate form and one catalytic material

in a moist environment for a time sufficient to form chlorous acid and chlorine dioxide together.

- 24. (Original) The process as described in Claim 23 wherein said catalytic material is on said anion exchange material.
- 25. (Original) A process as described in Claim 23 wherein said catalytic material is an ion exchange material.
- 26. (Original) The process as described in Claim 23 wherein said acid is a reducing agent.
- 27. (Original) The process as described in Claim 23 wherein said acid is mixed with a reducing agent.
- 28. (Original) A process for purifying a chlorous acid solution which comprises contacting said chlorous acid solution with an ion exchange material in a moist environment for a time sufficient to remove unwanted ions from said chlorous acid solution.
- 29. (Original) The process as described in Claim 28 wherein said ion exchange material is mixed with an additive.

- 30. (Original) A process for purifying a chlorine dioxide solution which comprises contacting said chlorine dioxide solution with an ion exchange material in a moist environment for a time sufficient to remove unwanted ions from said chlorine dioxide solution.
- 31. (Original) The process as described in Claim 30 wherein said ion exchange material is mixed with an additive.
- 32. (Original) A process for substituting desirable ions for undesirable ions in a chlorous acid solution which comprises contacting said chlorous acid solution with an ion exchange material containing said desirable ions in a moist environment for a time sufficient to substitute said desirable ions for said undesirable ions in said chlorous acid solution.
- 33. (Original) The process as described in Claim 32 wherein said ion exchange material is mixed with an additive.
- 34. (Original) The process as described in Claim 32 wherein said desirable ion is a stabilizing ion.

- 35. (Original) A process for substituting desirable ions for undesirable ions in a chlorine dioxide solution which comprises contacting said chlorine dioxide solution with an ion exchange material containing said desirable ions in a moist environment for a time sufficient to substitute said desirable ions for said undesirable ions in said chlorine dioxide solution.
- 36. (Original) The process as described in Claim 35 wherein said ion exchange material is mixed with an additive.
- 37. (Original) The process as described in Claim 35 where said desirable ion is a stabilizing ion.
- 38. (Original) A process for adjusting the pH of a chlorous acid solution which comprises contacting said chlorous acid solution with an ion exchange material in a moist environment for a time sufficient to adjust the pH of said chlorous acid solution.
- 39. (Original) The process as described in Claim 38 wherein said ion exchange material is mixed with an additive.
- 40. (Original) A process for adjusting the pH of a chlorine dioxide solution which comprises contacting said chlorine dioxide

solution with an ion exchange material in a moist environment for a time sufficient to adjust the pH of said chlorine dioxide solution.

- 41. (Original) The process as described in Claim 40 wherein said ion exchange material is mixed with an additive.
- 42. (New) The process as described in Claim 2 wherein said chlorous acid contacts a catalytic material in a moist environment for a time sufficient to form chlorine dioxide.
- 43. (New) The process as described in Claim 4 wherein said chlorous acid contacts a catalytic material in a moist environment for a time sufficient to form chlorine dioxide.

05